

MULTIMEDIA EXPERT

INTRODUCTION

Photo- and video-editing software is packed with special effects, but how do you incorporate them into projects without them becoming too gimmicky? Effects can be used correctly to fix colours or creatively to add some extra visual excitement, but it's tricky to do the latter without them becoming too intrusive. If your audience is admiring your use of effects, the chances are they've stopped thinking about the subject matter.

One solution is to use effects that mimic the qualities of film. These can have a significant impact on the appearance of videos and photos, but because they're traits we're accustomed to seeing, they don't get in the way of the subject matter. More than that, effects such as sepia colours and diffused highlights can be extremely evocative, creating a look that reinforces and reflects the mood you want to convey.

Ben Pitt

Music and photography expert

ben@computershopper.co.uk



Emulating film effects

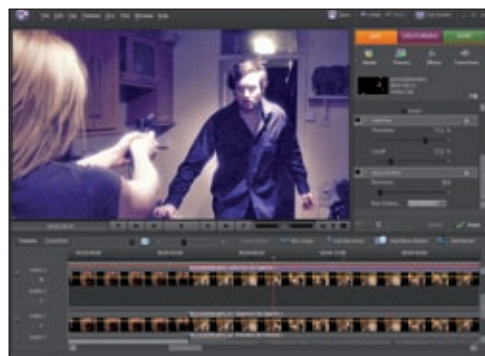
Using lots of effects can ruin a video, but careful use can add to the mood. Ben Pitt borrows some techniques from the pros

If you've never seen Marc Caro and Jean-Pierre Jeunet's 1991 film *Delicatessen* – and in fact, even if you have – get hold of a copy and watch it. Aside from being a fantastically macabre black comedy, it's also a masterpiece of cinematography. The film opens with an exterior shot in what appears to be sepia colour, but other colours are gently introduced as the opening scene proceeds. From then on, the film regularly shifts between sepia and full colour, without ever quite reaching either extreme. These shifts are used to reinforce the narrative, with the more romantic and surreal scenes tending to be more sepia-toned. This effect is achieved through coloured props, lighting and smoke as well as photographic filters, but it's an inspiring demonstration of how a visual effect can be used to manipulate the emotive energy of a scene.

If you're shooting as well as editing a creative project, you might want to plan your colour scheme in advance, choosing props and clothes that will complement the look you want to give your production. However, even if you have no control over this, there's still a lot you can do with software. Let's see what's possible using our two favourite video editors, Sony's Vegas family of software and Adobe Premiere Elements.

Vegas comes with a dedicated Sepia effect that does a reasonable job of imitating the effect used in *Delicatessen*. It includes controls for defining the colour applied to the footage, plus Blending strength, which varies from un-effected to a complete block-colour fill. Setting this to somewhere around the mid-point will produce colours that have a strong sepia tint while retaining some of the colour information from the original footage.

However, the downside of this Sepia effect is that it comes at the expense of contrast. The effect is broadly equivalent to placing a translucent (semi-transparent) filter over the video footage – it tints the colours, but in doing so, brightens the dark areas and darkens the bright areas. Admittedly, a true sepia image does range from off-white to deep brown, but let's not allow accuracy to get in the way of our creative expression. The Sepia effect's Blending falloff control restores the lost contrast, but it also desaturates colours, making them appear more black and white than sepia.



▲ By combining various effects in Premiere Elements we're able to give highlights a diffuse glow

COLOUR MAPPING

For superior sepia colours, try Vegas's Gradient Map effect. This maps the luminance (brightness) of each pixel to a user-defined colour gradient made up of two or more colours. For example, using black at the dark end of the spectrum and white at the light end converts footage to greyscales. However, adding a third colour in the middle (by double-clicking the gradient) will give a tint to the mid-tones – use orange and your footage will take on a sepia appearance. However, blacks will remain black, and whites remain white, with just as much contrast as the original footage.

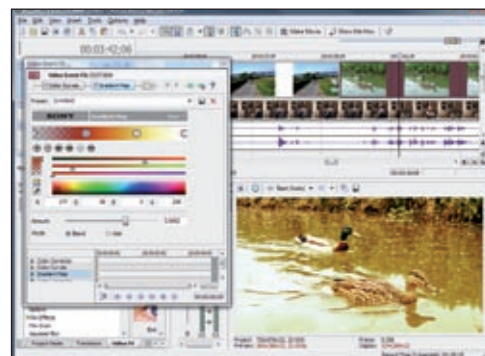
The Gradient Map effect provides added flexibility in that each point on the gradient can be moved to alter the colour balance. Dragging the mid-point to the left, for example, will brighten up the mid-tones. It's also possible to add lots more points on the gradient, perhaps to tune the brightness of mid-tones more precisely or even to give brighter and darker areas slightly different hues.

Gradient Map also includes the ability to alter the strength of the effect, both overall with the Amount slider, and also for each defined colour. Each one has an Alpha control, which adjusts its opacity (how visible or transparent it is). Using these controls, it's possible to make each part of the gradient retain varying amounts of the colour of the original footage. This is perfect for creating subtle sepia-like effects while maintaining some of the original colour information, although it needs careful tweaking to get it to interact well with the source footage.

One trick that tends to work quite well is to use vivid colours in the gradient but to keep the Alpha or the Amount values fairly low. This way, it's possible to impose a significant amount of sepia colour to footage without suppressing the original colours too much. The result is a vibrant colour palette that, with any luck, doesn't look distractingly artificial.

SEPIA EFFECTS IN PREMIERE ELEMENTS

Adobe Premiere Elements' dedicated sepia filter doesn't suffer the same contrast problems as Vegas's. It's located in the Old Film effect, and consists of a slider that changes the output from original colours through



▲ Vegas's Gradient Map applies a colour gradient to footage but keeps elements of the original colours

Glow for it Applying film effects to photos

The techniques described here apply to photos just as much as to videos, and it's often easier to achieve great results. You don't have lots of frames with varying colours to worry about, so you can optimise settings for the photo you're working on. Photo editors such as Photoshop Elements also offer more sophisticated tools for combining layers using Blend Modes.

Our example photo of Paris at dusk is fairly atmospheric to start with, but its colours look a little flat. We combined various techniques to create our processed version, and if you have Photoshop or Photoshop Elements installed you can see them more clearly by opening the file, PhotoVideoExpert_ParisSepia.psd, which you'll find on this month's cover disc.

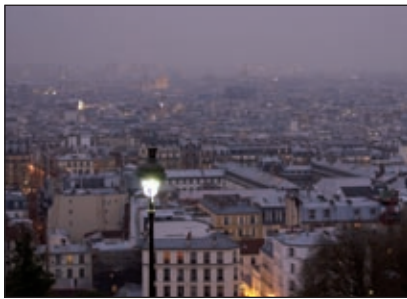
First we duplicated the image to a second layer by right-clicking Background in the

Layers palette and selecting Duplicate Layer. We then turned the upper layer into a greyscale image (Ctrl-Shift-U) and subjected it to some extreme settings using the Levels filter (Ctrl-L) – we moved the black and white Input Level points towards the middle so that the brightest parts of the image were solid white, the sky was grey and the rest was black. Next, we used the Gaussian Blur effect to diffuse these highlighted areas, and changed the layer's Blend Mode to Screen. This combined the processed and original versions of the image, giving something similar to the original photo but with a hazy glow around lights and the sky.

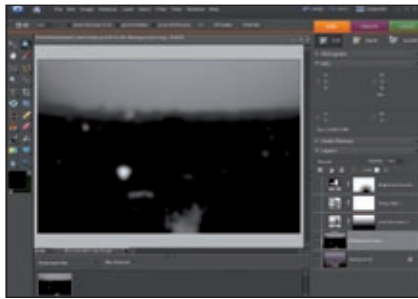
Next, we added a couple of effects as adjustment layers. Most effects are applied destructively in Photoshop, which means they can't be undone except with the Undo button. Adjustment layers, on the other hand, are

more like effects in video-editing software, as they're applied non-destructively and can easily be adjusted or removed later, as long as you save the image in Photoshop's native PSD format. Adjustment layers also differ from normal effects in that they process all the layers below them in the Layers palette rather than just the selected layer.

Here, we used the Photo Filter adjustment layer, available via the two-tone circle in the Layers palette. We chose a sepia-like colour and applied it with 91 per cent intensity to allow a small amount of the original colours through. We kept the Preserve Luminosity box ticked so that it didn't diminish the contrast of the photo. Finally, we applied a Brightness/Contrast adjustment layer to boost the contrast further, which had the welcome side effect of making the colours more vivid, too.



▲ Our original photo of Paris is quite moody, but we can enhance this with some film-like effects



▲ We combined this blurred greyscale version with the original photo to make highlights glow



▲ After processing, Paris has an ethereal glow, and the sepia tint lends atmosphere

sepia to black and white. Positioning it slightly to the left of the centre position gives a sepia effect with a hint of the original colours. Boosting the saturation using the Image Control effect that's available by default for each clip will ensure that the original colours aren't suppressed too heavily by the sepia effect.

The downside is that you have no control over the colour of the sepia effect. If you want to choose your own colour, try Premiere Elements' Tint effect. This is similar to Vegas's Gradient Map but not as powerful, as only the black and white points can be mapped to other colours, and there's no option to add extra mid-tones. As such, it's fine for converting to greyscales, but converting to sepia (by mapping black to brown and white to beige) reduces the contrast. You can restore the contrast using the Image Control effect, although you'll need to apply a second instance of this as it needs to sit after Tint in the effects chain. Bear in mind that when doing so, you'll adjust both the tinted and the original colours. This can get quite cumbersome, and we found that, in Premiere Elements, we achieved the best sepia tones using the Old Film effect.

GLOWING REPORT

Another film that uses heavily processed colours is Spielberg's *Minority Report*. Here, the world is a cold-looking place, and a blue tint is used throughout the film. Again, it's used in varying amounts, with action sequences looking more processed than the dialogue-based scenes. The procedure for replicating this effect is exactly the same as for reproducing *Delicatessen*'s warm, sepia-like colours, except that you use blues instead of orange and brown. In Premiere

Elements, you'll have to resort to the Tint effect, as the Old Film effect does only sepia tones.

Minority Report uses another filter throughout that gives highlights a diffuse glow. This simulates the blooming caused by clipped highlights in digital and film cameras, where parts of a scene are too bright to measure at the current exposure settings. As a result, those pixels – or areas of the film – are recorded as pure white (known as highlight clipping), but it also causes the light to leak to adjacent areas of the photos, creating a halo-like glow. It's generally considered undesirable as it tends to obliterate colour information in bright areas of a frame. However, as Spielberg demonstrates in *Minority Report*, it does have a certain ethereal quality that can be quite attractive.

Vegas has an effect specifically for this purpose, appropriately titled Glow. It has four controls: the colour to use for the glow effect, which is generally best left as white; Glow percent, which controls how far the glow spreads; Intensity, which is essentially an amount control; and Suppression, which sets how much of the image it's applied to. We find that the White Highlights preset is often a good place to start, but the Suppression control usually needs adjusting to balance with the source footage.

There is no equivalent effect in Premiere Elements, but you can build one in stages. You'll need to duplicate a clip and stack one copy on top of the other, so it may be worth applying it to the entire video once you have completed all other editing jobs and rendered it as a single file.

Copy the clip in question, paste it into a blank part of the timeline and drag it to the video track directly above the original; Premiere Elements'

snapping function will help to line them up. You don't need two copies of the audio, so right-click on one of the clips and select Delete Audio.

On the upper clip, apply the Extract effect, which turns colours into pure black and pure white. Click the Edit Effects button to access the effect's settings. Move the White Input Level slider all the way to the right and adjust the Black Input Level so that only a few highlights are white and most of the footage is black. Keep the Softness slider at the left so there's a clear distinction between white and black areas.

The next effect you need is Luma Key, which makes certain parts of the image invisible, depending on their brightness. The default settings will make the black parts invisible, which is exactly what we want so that the underlying, unaffected video shows through. Next, add the Gaussian Blur effect to soften the white areas, giving the impression of a diffuse glow. The Blurriness slider is rather tricky to adjust as it tends to take huge leaps when you're trying to make fine adjustments. Holding down Ctrl as you adjust keeps it under control, and double-clicking the value readout and typing in a number works too. Finally, find the Opacity control above the list of effects settings and reduce it so that the glow effect blends convincingly with the underlying footage. **CS**

Next month

INTRODUCTION TO SYNTHESIS

Make sense of all the instrument controls in music software